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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/752,434	01/06/2004	Yeshwanth Narendar	S1432-700819	3742	
37462	7590 01/20/2006		EXAM	INER	
LOWRIE, LA	ANDO & ANASTASI		GROUP, KARL E		
RIVERFRON	T OFFICE TREET, ELEVENTH FLOO	R	ART UNIT	PAPER NUMBER	
CAMBRIDGE, MA 02142			1755		
			DATE MAILED: 01/20/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	10/752,434	NARENDAR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Karl E. Group	1755	_			
The MAILING DATE of this communication appe Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (6(a). In no event, however, may a reply be tim (ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 De	ecember 2005					
· · · · · · · · · · · · · · · · · · ·	action is non-final.					
3) Since this application is in condition for allowan		secution as to the morits is	•			
closed in accordance with the practice under E.			5			
closed in accordance with the practice under L.	x parte Quayle, 1933 C.D. 131, 43	15 O.G. 215.				
Disposition of Claims	· ·					
4) Claim(s) 1-15 and 23-37 is/are pending in the a	application.					
4a) Of the above claim(s) <u>1-13 and 25-29</u> is/are						
5) Claim(s) is/are allowed.	,					
6) Claim(s) 14,23,24 and 30-37 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement					
are subject to restriction and/or	ciconomic quincine.					
Application Papers						
9) The specification is objected to by the Examiner						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction		• •	d)			
11) The oath or declaration is objected to by the Exa		•	<i></i>			
	this	Addition 101111 10-102.				
Priority under 35 U.S.C. § 119	ì					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents	have been received.					
3.☐ Copies of the certified copies of the priori	• • •					
application from the International Bureau	•	e iii alao i talloniai otago				
* See the attached detailed Office action for a list of		d.				
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Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da	ite atent Application (PTO-152)				
Paper No(s)/Mail Date <u>12-28-05</u> .	6) Other:	and in Application (1 10-102)				

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-28-05 has been entered.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 2. Claims 14,15,23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to provide support for recrystallized silicon nitride and aluminum oxide or provide sufficient description as to how to form these materials.
- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 14,15,23,24,30-32 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims set forth "an active impurity component" however the claims fail to define what the impurity is active with and what impurities it is limited to. Therefor the metes and bounds of the claims cannot be determined. Furthermore it is not clear if the total impurity amount is limited to 1 ppm or each single impurity is limited to 1 ppm.

Claim Rejections - 35 USC § 102 and 103

- 5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 6. Claims 14,15,23,24,30-34, and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese documents 10-2287974 and 07-328360.

Claims 14,15,23,24,30-34 and 37 fail to compositionally define the "active impurity" and therefor fail to limit the impurity level to any specific impurity and therefor not distinguishing from the compositions of the Japanese documents. The Japanese documents teach porous recrystallized silicon carbide bodies with 10-2287974 having a pore size of 15-40 microns and 07-328360 a pore size of 20 microns. Applicants argument that the Japanese documents fail to teach a network of pores is not persuasive in overcoming the rejection. Firstly a "network" of pores is not equivalent to connected pores. Secondly Japanese document 07-328360 teaches a honeycomb-like pore structure which would be connected, see claim 2; and 10-228974, in the abstract teaches the porosity must be above greater than 30% to remain communicated. Machine translations of the documents are included.

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7. Claims 33,34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Holmes et al (5,770,324).

Column 2, lines 9-15 teach recrystallized silicon carbide of an open pores size of 6-10 microns. The claims are considered anticipated.

8. Claims 14,15,23,24,30-34,35-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dubots et al (6,162,543).

Dubots et al teach a recrystallized silicon carbide porous body, where the porous body is recrystallized before siliconization, column 5, lines 30-34. The silicon carbide material has a total impurity level of less than 10ppm, with Fe less than .1 ppm, column 5, lines 6-21. Photomicrograph Figure 1, shows porosity greater than 5 microns.

It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

- 9. The rejection over GB 2130195 is withdrawn in view of the amendments limiting the claims to recrystallized silicon carbide, impurity levels less than 1 ppm and/or the claimed pore size. The GB patent does not disclose a pore size although the intermediate is disclosed as porous.
- 10. Claims 1-13,25-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Keg 1-18-06